FREY ENVIRONMENTAL, INC.

Environmental Geologists, Engineers, Assessors

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Fax (714) 723-1854

July 9, 1998
172-01

Regional Water Quality Control Board
Los Angeles Region
101 Center Plaza Drive
Monterey Park, California 91754-2156

Attention: Wendy Liu

Enclosed is one copy of a document titled "Workplan, Groundwater Investigation, Former Mondo Chrome Facility, 4933 Firestone Boulevard, Southgate, California" dated July 8, 1998.

I believe this workplan addresses the issues of concern discussed during the meeting between Regional Water Quality Control Board personnel, Howard Kay and myself on May 28, 1998. I would appreciate an expedient reply to the workplan as Mr. Kay will be in the Los Angeles area during the last week of July and would like to witness the installation of the groundwater monitoring wells.

Should you have any questions, please feel free to call me at (949) 723-1645.

Sincerely,
FREY Environmental, Inc.

Evan Privett
Senior Engineering Geologist

cc: Howard Kay
The Kay Companies
475 Seventeenth Street
Suite 940
Denver, Colorado 80202

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Wendy Liu
Regional Water Quality Control Board
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101 Centre Plaza Drive
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WORKPLAN
GROUNDWATER INVESTIGATION
FORMER MONDO CHROME FACILITY
4933 FIRESTONE BOULEVARD
SOUTHGATE, CALIFORNIA

This workplan summarizes the procedures to perform a groundwater investigation at the former Mondo Chrome facility located at 4933 Firestone Boulevard in Southgate, California (Site) (Figure 1).

OBJECTIVE

The objective of the scope of work discussed below is to assess the occurrence of chlorinated volatile organic compounds (CVOCs) in groundwater at locations adjacent to the Site.

SCOPE OF WORK

Task 1 - Permitting

FREY Environmental, Inc. (FREY) will obtain necessary permits from the City of South Gate, Los Angeles County Department of Environmental Health and Caltrans for the installation of groundwater monitoring wells.

Task 2 - Drilling and Installation of Three Groundwater Monitoring Wells

FREY will drill and install three groundwater monitoring wells in the locations shown on Figure 2. Groundwater monitoring well MW1 will be installed in the hydrogeologic upgradient location from the former clarifier at the Site. Groundwater monitoring wells MW2 and MW3 will be installed in the hydrogeologic downgradient direction from the former clarifier. Groundwater has been documented to flow toward the south in the Site vicinity (Emcon, 1995).

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Groundwater monitoring wells MW1, MW2 and MW3 will be hand excavated to 4 feet below the ground surface (bgs) to locate and avoid piping and extended to final depths (60 feet bgs) with a truck mounted drilling rig using 8-inch diameter hollow stem augers. Groundwater is anticipated to be encountered at approximately 45 feet bgs.

Soil samples will be collected at five foot depth intervals from 5 feet bgs to approximately 45 feet bgs or the depth of first encountered groundwater. Soil samples and soil cuttings will be examined for the visual and olefactory presence of CVOCs and will be described using the Unified Soil Classification System (USCS). A photoionization detector (PID) will be used to further measure the presence of CVOCs in soil samples.

Groundwater monitoring wells MW1, MW2 and MW3 will be drilled to final depths of approximately 60 feet bgs. Slotted, two-inch diameter, schedule 40 poly vinyl chloride (PVC) casing will be installed from 35 feet bgs to 60 feet bgs. Blank, two-inch diameter, schedule 40 PVC casing will be installed from 35 feet BGS to the ground surface. Sand will be placed in the annulus between the borehole wall and the casing and will extend from the bottom of the borehole to approximately 33 feet bgs. The groundwater monitoring wells will be surged and bailed during the placement of sand. Approximately three vertical feet of wetted, bentonite chips will be placed on top of the sand pack to serve as a seal against fluid migration. A bentonite based grout will be placed on top of the bentonite chip seal and will extend to approximately three feet bgs. Groundwater monitoring wells will be completed by installing a traffic rated well box set in concrete over each casing.

Groundwater monitoring wells MW1, MW2 and MW3 will be developed by pumping no sooner than 48 hours after well installation. Groundwater monitoring wells will be surveyed for elevation and location by a State of California registered land surveyor. All activities will be conducted in general accordance with standard engineering principals and protocol.

Task 3 - Groundwater Monitoring Well Sampling

Groundwater monitoring wells MW1, MW2 and MW3 will be measured for depth to water and checked for the presence of liquid hydrocarbons (LHCs) no sooner than 72 hours after groundwater monitoring well development. Wells which do not contain LHCs will be purged of 3 to 5 well volumes of groundwater and then sampled. Wells which contain LHCs will be measured for LHC thickness and then purged to remove LHCs.

Task 4 - Laboratory Analyses

A total of six soil samples will be selected for laboratory analyses based upon field observations. Soil and groundwater samples will be analyzed for CVOCs in general accordance with EPA Method No. 8010.

Task 5 - Data Evaluation and Report

Field measurements, observations and chemical analyses of soil samples will be evaluated and interpreted in context with the existing on-site soil conditions and the hydrogeological setting. A report describing our findings will be prepared and submitted for your approval.

Should have any questions or concerns please contact us at (949) 723-1645.

Sincerely,
FREY Environmental Inc.

REGISTERED ENGINEERING GEOLOGIST
JOSEPH P. FREY
No. 1500
Exp.
STATE OF CALIFORNIA

Joe Frey
Principal Certified
Engineering Geologist

Evan Privett
Senior Engineering Geologist

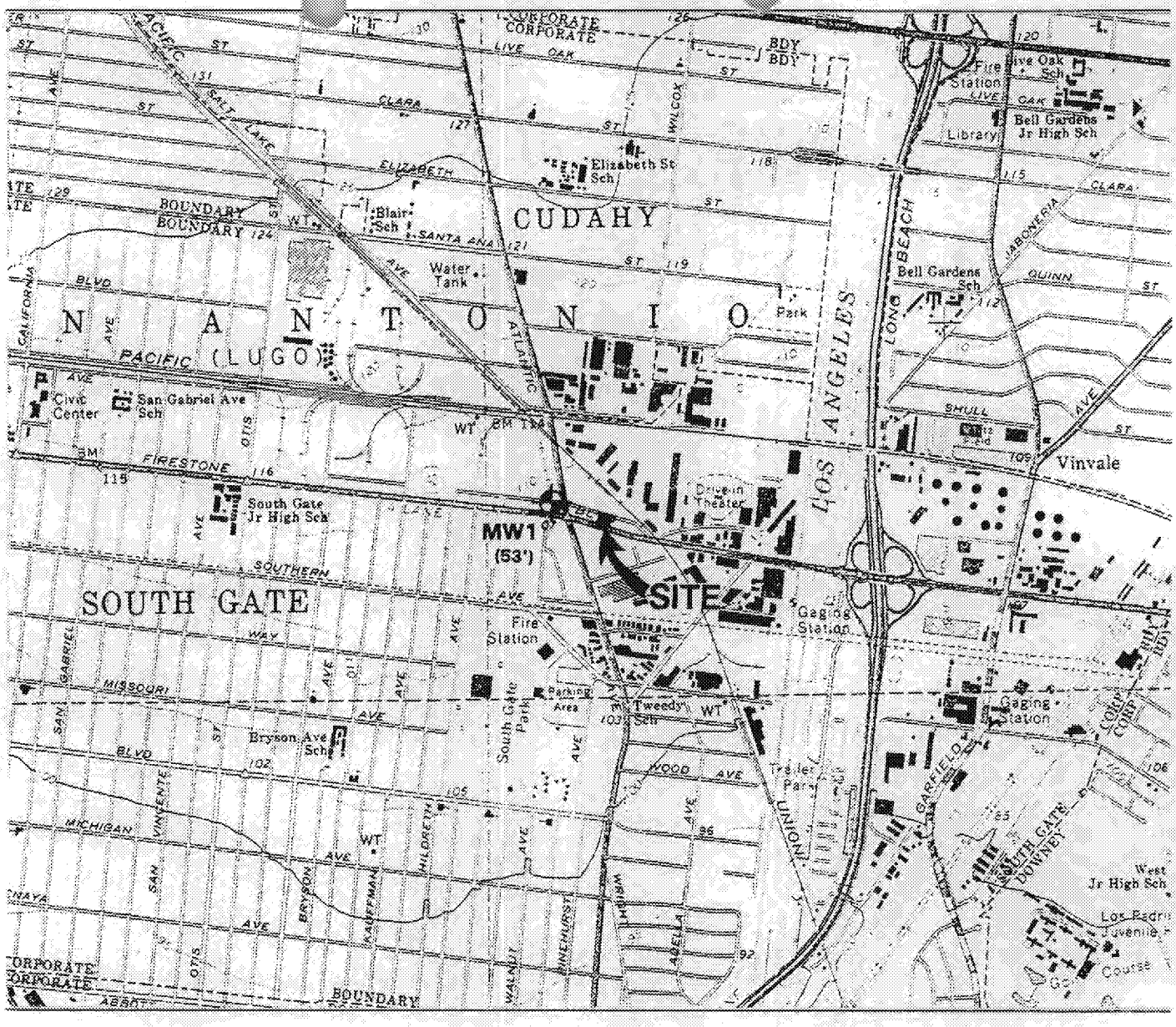
attachments
Figure 1 - Site Location Map
Figure 2 - Site Sketch Showing Proposed Groundwater Monitoring Wells

Reference:

Emcon, 1995, Adjacent Property Review for the Purpose of Identifying an Off-Site Source of Chlorinated Volatile Organic Compound-Impacted Groundwater, dated November 2, 1995.

cc: Howard L. Kay
The Kay Companies
475 Seventeenth Street
Suite 940
Denver, Colorado 80202

FIGURES



EXPLANATION

- ⌖ Groundwater well UNOCAL property
- **MW1** Well number
- (53') Depth to groundwater in feet MSL (1994)

NORTH

0 1/2 1

SCALE IN MILES

FORMER MONDO CHROME FACILITY
4933 FIRESTONE BOULEVARD
SOUTH GATE, CALIFORNIA

NOTES:

1) All locations and dimensions are approximate.
2) Base map from USGS 7.5 minute South Gate (1966, photorevised 1981), California topographic quadrangle.
3) Groundwater well data from FUGRO West, Inc., project no. 94-48-1320.

Client: TEDESCO LEASING **Project No.:** 172-01

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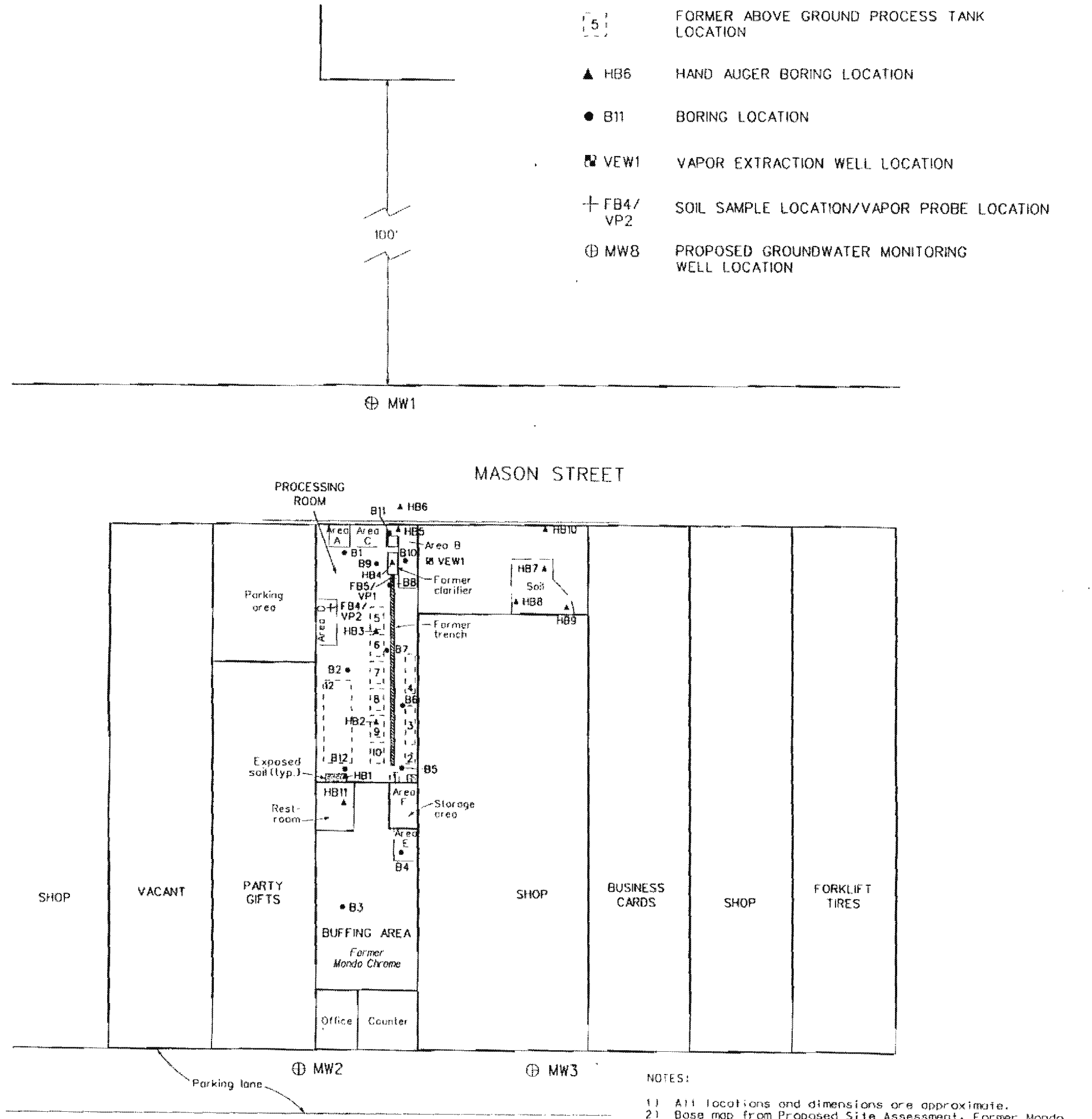
SITE LOCATION MAP

Date: JANUARY 1996 **Figure:** 1

EXPLANATION

5	FORMER ABOVE GROUND PROCESS TANK LOCATION
▲ HB6	HAND AUGER BORING LOCATION
● B11	BORING LOCATION
VEW1	VAPOR EXTRACTION WELL LOCATION
FB4/ VP2	SOIL SAMPLE LOCATION/VAPOR PROBE LOCATION
MW8	PROPOSED GROUNDWATER MONITORING WELL LOCATION



NOTES:

1) All locations and dimensions are approximate.
2) Base map from Proposed Site Assessment, Former Mondo Chrome Facility, by Fugro West, Inc., project no. 94-48-1320, dated August 1994, and field observations made by FREY Environmental, Inc. July 1996.

NORTH

0 20 40

SCALE IN FEET

FORMER MONDO CHROME FACILITY
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Client: TEDESCO LEASING Project No.: 172-01

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SITE SKETCH SHOWING SOIL SAMPLE, VAPOR EXTRACTION WELL, AND VAPOR PROBE LOCATIONS

Date: JULY 1998 Figure 2